

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A name resolution device for managing a name of each node connected to a network and an address for identifying each node, comprising:

a node information storing unit configured to store a node information containing a name of a node, a network identification information, a prefix indicating a position on the network, and an interface identification information of a node, for each node;

a node information collecting unit configured to collect the node information of other nodes connected to the network, through the network; [[and]]

a node information updating unit configured to update the node information stored in the node information storing unit, according to the node information of the other nodes collected by the node information collecting unit, by updating the prefix stored in the node information storing unit by using the interface identification information contained in the node information collected by the node information collecting unit as a key;

a function conversion unit configured to convert the interface identification information corresponding to a prescribed node among the node information stored in the node information storing unit, by using a one-way function;

a comparing unit configured to compare the interface identification information converted by using the one way function which is received from another node, with interface identification information as converted by the function conversion unit; and

a node information providing unit configured to provide the prefix corresponding to the interface identification information compared by the

comparing unit to the another node, only when it is judged that the interface identification information coincides at the comparing unit.

2. (Original) The name resolution device of claim 1, wherein the node information updating unit updates the node information stored in the node information storing unit for which the interface identification information coincides with that of the node information collected by the node information collecting unit but the prefix does not coincide with that of the node information collected by the node information collecting unit.

3. (Cancelled)

4. (Currently Amended) The name resolution device of claim ~~[[3]]~~1, wherein the function conversion unit uses a hash function as the one way function.

5. (Original) The name resolution device of claim 1, further comprising:
a prefix conversion unit configured to convert the prefix into a position identification information which is in one-to-one correspondence to the prefix;
wherein the node information storing unit stores the position identification information obtained by the prefix conversion unit, as the prefix.

6. (Original) The name resolution device of claim 1, further comprising:
an address generation unit configured to generate an IPv6 address dynamically, according to the node information stored in the node information storing unit.

7. (Currently Amended) A name resolution method for managing a name of each node connected to a network and an address for identifying each node, comprising:

storing a node information containing a name of a node, a network identification information, a prefix indicating a position on the network, and an interface identification information of a node, for each node;

collecting the node information of other nodes connected to the network, through the network; [[and]]

updating the node information stored by the storing [[step]], according to the node information of the other nodes collected by the collecting [[step]], by updating the prefix stored by the storing [[step]] by using the interface identification information contained in the node information collected by the collecting [[step]] as a key;

converting the interface identification information corresponding to a prescribed node among the node information stored by the storing, by using a one way function;

comparing the interface identification information converted by using the one way function which is received from another node, with the interface identification information as converted by the converting; and

providing the prefix corresponding to the interface identification information compared by the comparing to the another node, only when it is judged that the interface identification information coincides at the comparing.

8. (Original) The name resolution method of claim 7, wherein the updating step updates the node information stored by the storing step for which the interface identification information coincides with that of the node information collected by the collecting step but the prefix does not coincide with that of the node information collected by the collecting step.

9. (Cancelled)

10. (Currently Amended) The name resolution method of claim [[9]]Z, wherein the converting step uses a hash function as the one way function.

11. (Original) The name resolution method of claim 7, further comprising: converting the prefix into a position identification information which is in one-to-one correspondence to the prefix;

wherein the storing step stores the position identification information obtained by the converting step, as the prefix.

12. (Original) The name resolution method of claim 7, further comprising: generating an IPv6 address dynamically, according to the node information stored by the storing step.

13. (Currently Amended) A ~~computer program product~~ computer-readable medium having computer-executable instructions for performing a method for causing a computer to function as a name resolution device for managing a name of each node connected to a network and an address for identifying each node, the ~~computer program product~~ method comprising:

~~a first computer program code for causing the computer to store~~ storing a node information containing a name of a node, a network identification information, a prefix indicating a position on the network, and an interface identification information of a node, for each node;

~~a second computer program code for causing the computer to collect~~ collecting the node information of other nodes connected to the network, through the network; [[and]]

~~a third computer program code for causing the computer to update~~
updating the stored node information stored in the first computer program code,
~~according to the collected node information of the other nodes collected by the~~
~~second computer program code,~~ by updating the stored prefix stored in the first
~~computer program code by using the interface identification information~~
~~contained in the collected node information collected by the second computer~~
~~program code as a key;~~

converting the interface identification information corresponding to a
prescribed node among the stored node information, by using a one way
function;

comparing the interface identification information converted by using the
one way function which is received from another node, with the converted
interface identification information; and

providing the prefix corresponding to the compared interface identification
information to the another node, only when it is judged that the interface
identification information coincides when comparing.

14. (Currently Amended) The ~~computer program product~~ computer-
readable medium of claim 13, wherein the ~~third computer program code updates~~
updating includes updating the stored node information ~~stored in the first~~
~~computer program code~~ for which the interface identification information
coincides with that of the collected node information ~~collected by the second~~
~~computer program code~~ but the prefix does not coincide with that of the collected
node information ~~collected by the second computer program code.~~

15. (Cancelled).

16. (Currently Amended) The ~~computer program product~~ computer-readable medium of claim ~~[[15]]~~13, wherein ~~the converting the fourth computer program code~~ uses a hash function as the one way function.

17. (Currently Amended) The ~~computer program product~~ computer-readable medium of claim 13, further comprising:

~~a fourth computer program code for causing the computer to convert~~
converting the prefix into a position identification information which is in one-to-one correspondence to the prefix;

wherein the ~~first computer program code stores~~ storing includes storing the converted position identification information ~~obtained by the fourth computer program code,~~ as the prefix.

18. (Currently Amended) The ~~computer program code~~ computer-readable medium of claim 13, further comprising:

~~a fourth computer program code for causing the computer to generate~~
generating an IPv6 address dynamically, according to the node information stored in the first computer program code.